

Support For  
**sinclair**

Z281 - spectrum - 01

and

**TIMEX/sinclair**

1000 - 1500 - 2068

computers

# TIMELINEZ

VOLUME 7

ISSUE 03

MARCH 1989

\$2.50

TIMEX/sinclair User Group News-Magazine

**HAPPY  
EASTER**

## VIEW FROM RAM-TOP

Welcome to another issue of **Timelinez**. At the last P.U.G. meeting, an observation was made concerning the printing of **SinLink** within this publication. It seems that due to the size and bulk of the text files (in other words: a lot of kbytes of text occupies too many pages) that consist of **SinLink**, in affect, 'consume' most available room where articles and projects could be printed. The result of this happened with the January and February 1989 issues. Other observations made were concerning the 'size of text and the unorthodox format design'. It may help for those to look at the format as an outline. Yes, many changes have occured in the past for **SinLink**, however, the changes have been for the better. The concern over the text size is something like being stuck between a rock and a wall. Just imagine taking the **SinLink** section of the February issue and expanding the text to **Timelinez** format. That means 4 columns converted to 2 over 9 pages. The result would give you up to and maybe over 18 pages. And that's for an 8 1/2 x 11 page. **SinLink** is normally pasted up on an 8 1/2 x 14 page. So you can see all the work that is involved in creating **SinLink**. With all this said, and starting with this issue, **SinLink** subscribers will receive their publication within a **Timelinez** cover. If you have not paid for the above, you will only receive **Timelinez**. For those who have paid for both will receive both. See **Timelinez Information** for the addresses to both publications if interested in subscribing to both.

The Editors....

## S . N . U . G . MEMOGRAM

Thank you very much for your interest in the Sinclair North America Users Group. We apologize that we were unable to return any inquiries sooner, but as this has become a 'one man show' we were unable to answer all correspondence in a timely manner. Thank you for your patience. With this correspondence we would like to bring you up to date on the latest activities of **S.N.U.G.**

So what have we been doing all this time? Plenty!! Firstly, we drafted a charter that was designed to allow for most provisions including expansion. This was a very time consuming task. The Charter has been sent to the Florida State Secretary of State and was approved on December 27, 1988. All funds up to now have been held and were deposited into a checking account on Dec. 31, 1988.

We have, with the help of the Library Committee, established a format to work the Public Domain Software Library. We currently have set up Librarians for the following machines and formats:

Head Librarian.....Frank Davis  
Assist. Head Librarian..Tim Ward

ZX-81, TS-1000, TS-1500  
Cassette, Larken DOS

-----  
Tim Ward, Tony Willing

Spectrum, TS-2068

-----  
Cassette.....Frank Davis  
A&J Microdrive and  
Wafadrive.....Andy Hradesky

Frank Davis  
Aerco.....Pete Fischer  
Larken - To Be Announced  
Oliger DOS.....Paul Holmgren,

Willie Jones,  
Gary Lessenberry  
Portugal TMX - To Be Announced

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## **TIMEXsinclair user group News-Magazine**

**SUPPORT FOR:**

TIMEXsinclair's  
1000, 1500, 2068

Sinclair's  
ZX Spectrum+ 128K  
Quantum Leap (QL)

# FRONT

# PAGE

PRINTED USING  
sinclair QL  
PROFESSIONAL  
COMPUTER AND  
THIS PROGRAM.

DESK-TOP PUBLISHING  
FOR THE SINCLAIR QL  
=====

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ST-EBZUG: John Ezike  
TCW T/S\_SIG: Mark Wahl  
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Pacifica, CA 94044  
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Back issues of **TIME-LINEZ**, 7/83 thru 12/87  
Contact Bill Miller at:

SinLink  
6675 Clifford Drive  
Cupertino, CA 95014

Issues 1/88 - present,  
contact your editor at  
**American Micro.**

The PDSE Library is  
now available to all;  
covering T/S1000-1500,  
T/S 2068, Spectrum and  
the QL.  
Contact **American Micro**  
for further details.

## S.N.U.G. CONTINUED....

C/PM.....Tim Stoddard  
Ramex SPDOS - To Be Announced

-----  
Quantum Leap (QL)

-----  
Microdrive  
Floppy Disc.....Tim Stoddard

-----  
Cambridge Z-88

-----  
Software and  
Eprom - To Be Announced

We are currently assessing what programs qualify for Public Domain and we are gathering programs at this time. We cannot give an accurate number of programs available, but we have conservatively estimated to have on hand approximately 850 Spectrum and TS2068 programs and 240 ZX81 and TS1000 programs as of January 1, 1989. We have been advised that several Commercial programs have been released into the Public Domain. Once all the details are arranged, an announcement will be made.

We have also been trying to put together a Publication Committee to determine how our Magazine will look and it's contents. Several of our respondents expressed interest in writing articles, so we should have several first time writers with some new applications.

At this time our membership rates are \$12.00 for individual and \$15.00 for User's Group. We are in the process of determining elections. The process is ongoing through the month of March and announcements of officers should be made on April 27, 1989.

The current officers are:

Mel Nathanson - Acting  
Chairperson,  
Pro-Tem.  
Paul Holmgren - Acting Vice-  
Chairperson,  
Pro-Tem.  
John 'JC' Cushran - Acting  
Treasurer,  
Pro-Tem.

The offices that will be voted on consist of:

President	1st Vice-President
Secretary	2nd Vice-President
Treasurer	

We hope that this press release will answer most questions. We also anticipate your joining the organization. There is something special about a person willing to take a chance on an idea that has nothing immediately tangible to be had for their hard earned money. It takes a person with vision, courage, and some money that they don't need right away! Ideas with as much scope as the one we are attempting are difficult enough to pull off without individuals such as the Charter Members and without your help, I really don't think this much could have been accomplished. Be proud - there are not many of you out there. We Thank you.

Mel Nathanson

S.N.U.G.  
7515 Arbordale Dr.  
Port Richey, FL  
34668

ATTN: Mel Nathanson

(813) 863-5552

## SCREEN PEEK'R BY LT TIMOTHY SWENSON

The following program allows the user to peek the screen and find out what color a particular pixel is. The program works only for the High Res. mode (4 color). I have tried to make it work for Low Res. mode, but have had no luck at all.

There is one thing to remember when using the program. If you use a block command for a particular window, the block appears relative to the window. The SCREEN PEEK'R does not work relative to any window. This is why a window the size of the display is defined.

Hope you can find the program useful. At the least it gives some insight as to how the QL stores the screen.

```

100 REMark SCREEN PEEK'R
110 REMark by LT Timothy Swenson
120 WINDOW 512,256,0,0
130 CLS
140 x=100 : y=123
    
```

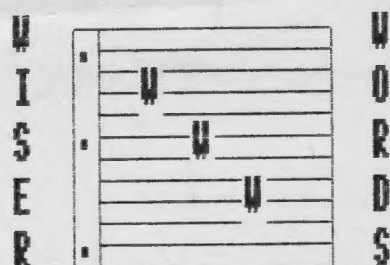


## SCREEN PEEK'R CONTINUED....

```

150 BLOCK 1,1,x,y,0
160 red=0 : green=0
170 pix=131072+(y*128)+(INT
    (x/8)*2)
180 peek1=PEEK(pix)
190 in=peek1 : dectobin
200 peek1%=out$
210 peek2=PEEK(pix+1)
220 in=peek2 : dectobin
230 peek2%=out$
240 bit=(x MOD 8)+1
250 green=peek1%(bit)
260 red=peek2%(bit)
270 IF red AND green THEN PRINT
    "WHITE"
280 IF NOT(red) AND NOT(green)
    THEN PRINT "BLACK"
290 IF red AND NOT(green) THEN
    PRINT "RED"
300 IF NOT(red) AND green THEN
    PRINT "GREEN"
310 REMARK *****
320 DEFine PROCedure dectobin
330 out$=""
340 FOR z=7 to 0 STEP -1
350 LET temp=in/2^z
360 IF temp>=1 THEN
370 out%=out%&"1"
380 in=in-(INT(temp)*2^z)
390 ELSE
400 out%=out%&"0"
410 END IF
420 NEXT z
430 END DEFine

```



## WISDOM

It is impossible to make any programs foolproof because fools are so ingenious.

To iterate is human; to recurse, devine.

Counting in octal is just like counting in decimal, if you're missing two fingers.

Counting in binary is just like counting in decimal, if you're all thumbs.

Don't sweat it - it's only ones and zeros.

To err is human, to really foul-up requires a computer.



Dear Fellow TSers,

Hi! I am interested in participating in your Public Domain Swapping Program. I use the TS-1000, 1500, & the 2068 and I am currently trying to set up a Software Connection of Buying and Selling TS SW (and some HW).

I am looking forward to being in contact with several TSUG's. My address is: Charles Ridgway  
2816 Chestnut  
San Angelo, TX  
76901

My Phone # (915) 942-7564

Thank you

Dear Sir or Madame,

I would like as much information as possible on supplies, publications, newsletters, software, etc., available for my TIMEX sinclair ZX81/1000 computer.

If you have any information at all, please help me by writing a few lines. Thank you.

Ruth M. Engel  
14699 NE 18th Avenue (6M)  
N. Miami, Florida 33181

With regard to the attached label. Why did you decide to place "Mrs" in front of my name? Have problems with "Ms"? Also the name of the town ends with an "o" not an "a". Kindly correct the mailing label. What's the telephone number to Kevin Leung's BBS?

Ed. note: Your label is corrected, I guess I was viewing you optimistically. Kevin's BBS # is (415) 753-5265. My apologies for not printing it in Jan.'s issue.

## TS CHAOS

CHAOS is everywhere-the stars, weather, columns of smoke, biology, noise on a phone line. It is a new math. It can be studied on your TS computer.

The CHAOS equation I've selected here was used by biologist Robert May in the study of fish populations in a pond.  $x = rx(1-x)$  where  $x$  is a stable fish population for  $r$  which is the food supply.

(What we are looking at here is the equation. Using fish is just an example).

Lines 110 and 140 of the TS1500 Program set the initial value of  $x$  and then recalculate  $x$  200 times to stabilize it. Next,  $x$  is calculated 300 more times and is plotted against values of  $r$ . The result is shown in Figure 1.

In the CHAOS region from  $r=3$  to 4,  $x$  may have one of two values, four values, or even any value between two fixed limits.

## TS1500 PROGRAM CHAOS

```

10 CLS
50 FAST
100 FOR R=2.95 TO 4 STEP .01666
7 110 LET X=.3
120 FOR I=1 TO 200
130 LET X=R*X*(1-X)
140 NEXT I
150 FOR I=1 TO 300
160 LET X=R*X*(1-X)
170 PLOT (R*60-177),X*40
180 NEXT I
190 NEXT R
500 SLOW

```

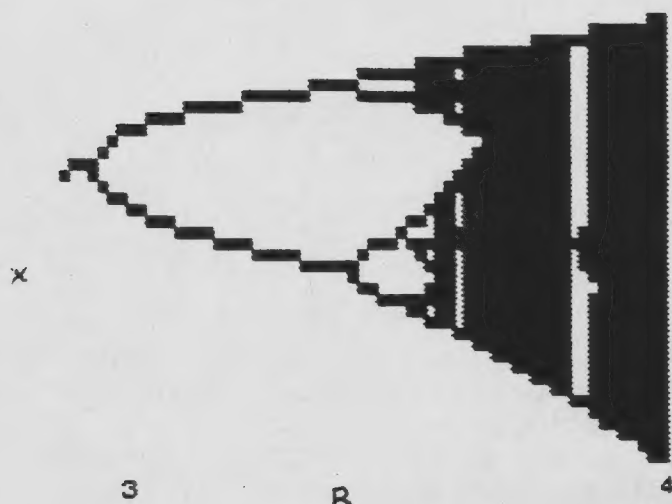


Figure 1. TS1500 CHAOS

by Bob Orrfelt

The TS1500 Program takes about 15 minutes to run.

To convert the TS1500 program to a TS2068 program just eliminate the FAST and SLOW and change the STEP and PLOT. RUN this and you get Figure 2 - the same thing but with more detail.

The figure has Mandelbrot properties. It can be magnified indefinitely and similar figures will appear. Sequences of 3, 6, 9 and even 7, 14, 28 can be found. The Sinclair BASIC calculates to 8 places giving plenty of accuracy for magnification.

## TS2068 PROGRAM CHAOS

```

2 LPRINT "          TS2068 PROGRA
M CHAOS"
4 LPRINT
6 LLIST
10 FOR r=2.98 TO 4 STEP .004
20 LET x=.3
30 FOR i=1 TO 200
40 LET x=r*x*(1-x)
50 NEXT i
60 FOR i=1 TO 300
70 LET x=r*x*(1-x)
80 PLOT (250*r-745),175*x
90 NEXT i
100 NEXT r
110 LPRINT : LPRINT
120 COPY

```

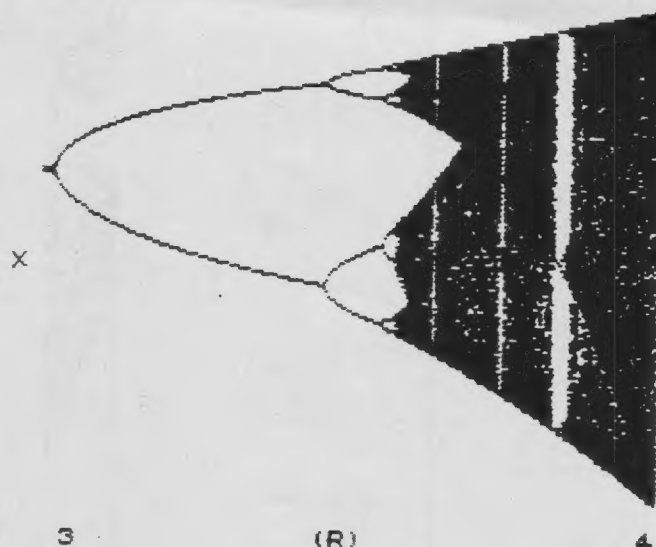


Figure 2. TS2068 CHAOS.

Instead of magnifying the figure, let's back off and look at the whole figure. For values of  $r$  beyond 4  $x$  may become negative and has no meaning. The possible value of  $r$  then is from 0 to 4. A STEP of 1/64 will give us 256 points to PLOT. The PLOT scale must be

## TS CHAOS

adjusted so the figure will fit on the screen.

Using the fish example, for  $r=0$  TO 1 the population crashes (no fish). From 1 TO 3 the population increases with the food supply. From 3 to 4 is CHAOS. In the CHAOS region the fish population will change from year to year. The wildest swings will be at  $r=4$ .

## TS2068 PROGRAM CHAOS

```

2 LPRINT "          TS2068 PROGRA
M CHAOS"
4 LPRINT
6 LLIST
10 FOR r=0 TO 4.095 STEP (1/64
)
20 LET x=.3
30 FOR i=1 TO 200
40 LET x=r*x*(1-x)
50 NEXT i
60 FOR i=1 TO 300
70 LET x=r*x*(1-x)
80 PLOT (63.75+r),x*175
90 NEXT i
100 NEXT r
110 LPRINT : LPRINT
120 COPY
122 LPRINT "0      1      2
3      4"
124 LPRINT "          (R)"
126 LPRINT : LPRINT : LPRINT

```

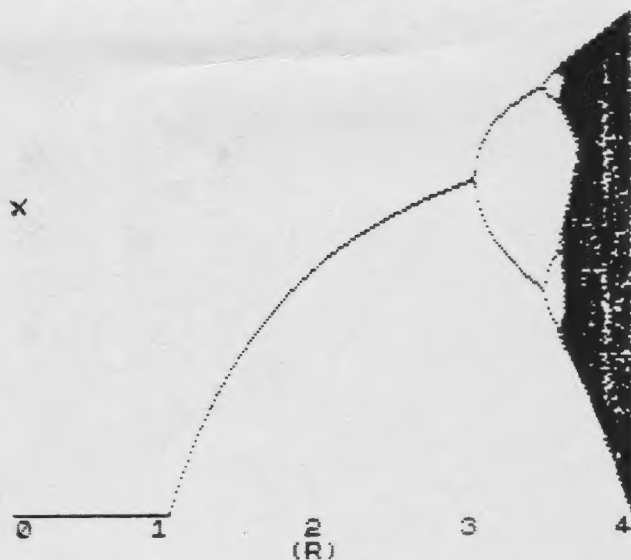


Figure 3. Complete plot.

Figure 3 shows the complete plot of the equation for values of  $r=0$  TO 4.

So far all these plots have been for a "stable population." The first 200 generations have been discarded. Figure 4 shows the first 200 generations start-

by Bob Orrfelt

ing with the initial condition  $x=.3$ . Notice the first generation forms a diagonal straight line.

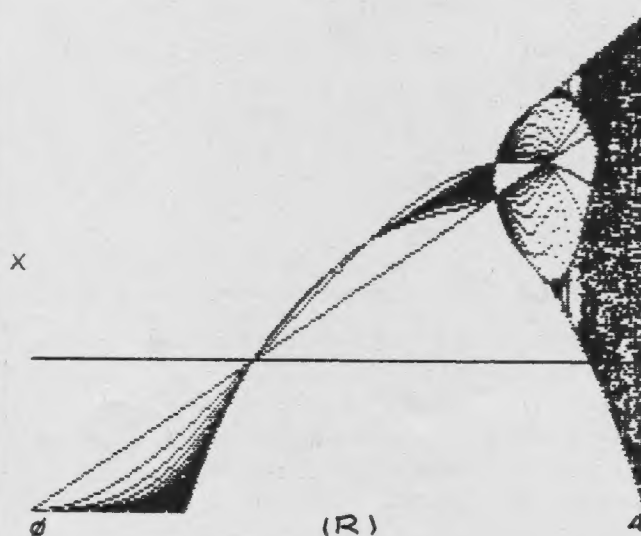


Figure 4. All generations.

Figure 5 is a plot of  $i$  vs  $r$ . This shows the number of generations it takes to settle down to one, two, or four values. If  $i$  is 175 or larger it is plotted on the top line.

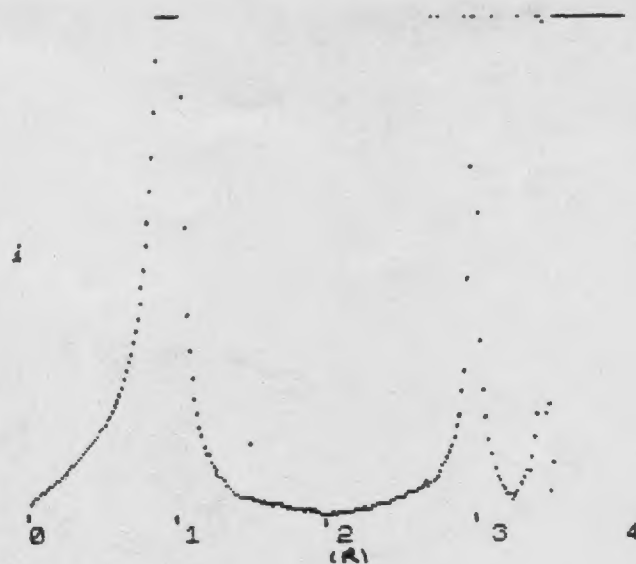


Figure 5. Number of generations.

What can we learn from all this? Checking  $r=4$  we find the 507th generation is 99.999994% of maximum and the 508th generation goes to 0.000025%. But after all it is only an equation.

(See Scientific American July '87 pg 108)

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APRIL 1, 8, 15, 22, 29, 1989  
MAY 6, 13, 20, 27, 1989

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APRIL 26, 1989  
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BEACH FEDERAL SAVINGS AND LOAN  
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DATES: MARCH 11, 1989  
APRIL 8, 1989  
MAY 13, 1989



## GLOSSARY OF COMPUTER TERMS RE-VISITED

**NETWORK** - What a fisherman does when he's not fishing.

**OFFICE INFORMATION SYSTEM** - The word processor who knows the most gossip.

**OHM** - Where the 'Eart is!

**OUTPUT DEVICE** - A word processor who can't say "NO!"

**PLASMA DISPLAY** - A bloody nose.

**PROGRAM** - A random collection of Bugs.

**READ/WRITE HEAD** - Men's room with a graffiti wall.

**RUNNING HEAD** - One which needs the handle jiggled.

**SILICON** - A foolish prisoner.

**SKEW** - Interface between consenting computers.

**SKEW FAILURE** - Premature calculation.

**SOFTWARE** - What hackers wear under their hardware.

**SOFTWARE STORE** - Frederick's of Hollywood.

**STANDARD OPERATING PROCEDURE** - The way nobody does it.

**TAPE PUNCH** - A non-alcoholic drink that comes on a roll and sticks to your fingers.

**TELEPACK** - A brewery that delivers.

**TERMINAL INTELLIGENCE** - To be so smart it kills you!

Here are some "cookies" that I pulled off of a BBS years ago. They might be usefull in filling small spaces in **TIMELINEZ**. I hope they can be of use.....LT Tim Swenson

- Digital circuits are made from analog parts.
- Any IC protected by a fst acting fuse will protect the fuse by blowing first.
- Give: Support the helpless victims of computer error.
- Shift to the left, shift to the right, mask in, mask out, Byte, Byte, Byte.
- Your program is sick! Shoot it and put it out of its memory.
- Every interesting Program has at least one variable, one branch, and one loop.....And at least one bug!
- If it works, Don't fix it!
- May all your PUSHes be POPed.
- Is a Jamaican terminal a raster-farian?
- Basic is a high-level languish.
- Constants aren't; variables don't.
- Computer programmers never die, they just get lost in the processing.
- On a clear disk you can seek forever.
- I'm all for computer dating,  
But I wouldn't want one to marry my sister.
- The generation of random numbers is too important to be left to chance.
- If debugging is the process of removing bugs, then programming must be the process of putting them in.
- Computers unite! You have nothing to lose but your operators.
- Recursive, ad.; see Recursive.
- Whom computers would destroy, they must first drive insane.
- All programmers want arrays.

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